SPARK OF MADNESS
UNLOCKING CREATIVE CURIOSITY
TODAY’S PRESENTERS

GAIL HERNANDEZ
EDUCATOR, ARTIST & MODERN-DAY MARY POPPINS, WITH AN EYE FOR MAGIC IN ORDINARY MOMENTS

DR. BEN CORBIN
MAD SCIENTIST, EXPLORER, PILOT & RESIDENT BADASS WHO JUST ADVISES NASA AND POTUS…NBD.

RACHEL FLOYD
IMPOSSIBLE OPTIMIST, DAREDEVIL, FORMER EDUCATOR TURNED STRATEGIST WHO DREAMS ON A BUDGET
WHAT IS CREATIVITY? | DEFINED BY URBANDICTIONARY.COM

**TOP DEFINITION**

**Creative**

What teachers call you when they don't want to say you are a dumbass.

*Your son, Jimmy, is a very, well, *creative... boy.*

by *Danny the girl* August 26, 2004
CREATIVES DRAW ON COMPLEX BODIES OF KNOWLEDGE TO SOLVE SPECIFIC PROBLEMS.
WHAT IS CREATIVITY? | DEFINED BY URBAN DICTIONARY.COM

Top Definition

Creative

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by Danny the girl August 26, 2004

334 likes

BUY THE MUG

BUY THE TSHIRT
WHAT IS CREATIVITY?

CREATIVITY IS ABOUT MAKING CONNECTIONS IN THE BRAIN.

img courtesy of: carlyjamison.com
DOES CREATIVITY OCCUR BY DEFAULT OR DESIGN?
CREATIVE IDEAS ARE ON A CONTINUUM.
If you look at what produces learning and memory and well-being, play is as fundamental as any other aspect of life.

DR. STUART BROWN
WHAT IS PLAY?

[Images of children playing, courtesy of weloveyouso.com, mykidsadventures.com, and libraryblog.freeworldu.org]
WHY DO CHILDREN PLAY?

...TO ENTERTAIN = THEY ARE HAVING FUN.

img courtesy of: theatlantic.com
WHY DO CHILDREN PLAY?

...TO ENGAGE = THEY ARE CONNECTING.

img courtesy of: nwf.org
WHY DO CHILDREN PLAY?

...TO EXPLORE = THEY ARE ASKING QUESTIONS.
WHY DO CHILDREN PLAY?

...TO EDUCATE = THEY ARE LEARNING.

img courtesy of: palmbeachillustrated.com

img courtesy of: lego.com

img courtesy of: friendshipcircle.org
WHAT HAPPENS TO PLAY AS WE MATURE?
CUTTING OUT RECESS

FACT:

20% of school systems have decreased time for recess, averaging cuts of 50 minutes per week.

Find out how this is affecting your child.

img courtesy of:
DEGRADATION OF THE ARTS

[Image of Rush album] img courtesy of: collectormusic.com

[Image of One Direction] img courtesy of: justjaredjr.com
ALLOW FOR RECESS (BUILD IT INTO SCHEDULES AND SPACE).

img courtesy of: highfiveparties.com
ENCOURAGE INTEGRATION OF THE ARTS IN STANDARD CURRICULUM (AND SPACE).
DESIGN AN ENVIRONMENT THAT ENCOURAGES PLAY, AND THEREFORE, CREATIVITY.
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DESIGN AN ENVIRONMENT THAT ENCOURAGES PLAY, AND THEREFORE, CREATIVITY.
It is the tension between creativity and skepticism that has produced the stunning and unexpected findings in science.

CARL SAGAN
PLACES I CAN VISIT BECAUSE I SPEAK TWO LANGUAGES…
CAREERS I CAN GET BECAUSE I “SPEAK” MATH


**TECHNOLOGY:** Audio Technician, Cloud Application Architect, Computer Systems Analyst, Database Administrator, Electrician, EMT, Information Security, Information Technology, Lab Technician, Machining, Manufacturing, Network Administration, Pharmacy Technician, Programmer, Software Developer, Software Engineering Analyst, Surgical Technologist, Veterinary Technician, Web Development, Welding, Wiring,


**COLD HARD TRUTH:** MATH IS THE LANGUAGE AT THE CORE OF EVERY SCIENCE, TECHNOLOGY, AND ENGINEERING CAREER.
UNLOCKING CREATIVE PATHWAYS FOR SECONDARY AND POST SECONDARY LEARNERS

TEACHING COMPLEX MATH IS EASIER THAN EVER.

$\log_2 64 = ?$

HOW TO CREATE AN ELLIPSE

$\frac{4 \sin \theta}{\pi}$

$\frac{4 \sin 3\theta}{3\pi}$

$\frac{4 \sin 5\theta}{5\pi}$

$\frac{4 \sin 7\theta}{7\pi}$
GIVE STUDENTS A REASON TO LEARN SOMETHING.

- Project-Based Learning

- Built in Rewards for Completion
  - Gives students a way to fail – AND THAT’S GOOD!
  - Gives students a way to fail EARLY
  - Gives students a way to fail OFTEN
  - Gives students a way to fail WITHOUT CONSEQUENCES

- Positive Reinforcement // Leveling Up for a System of Rewards
Knowledge without application is Fascination.

Knowledge with application is Purpose.
BASIC NEEDS ARE IMPORTANT TO CREATIVITY. HEALTHY SELF ESTEEM IS CRITICAL.

Discouraged, failed too often, no motivation to do better
No connection to reality, No reason to improve
Encouraged, driven to continue, realistic expectations and progress

Sweet spot, where there is a tempered balance, where a student feels confident but not reckless and cocky
Egomanical, Unrealistic Expectations of Invincibility

LOW

HIGH

SELF ESTEEM, MASLOW’S HIERARCHY OF NEEDS AND CREATIVITY
RECENT MEME

3 CHARACTERS THAT DEFINE YOU
3 CHARACTERS THAT DEFINE YOU
CREATIVITY AND EMPATHY CAN BE DRAWN FROM DIVERSE SOURCES OF INSPIRATION.

STUDENTS NEED TO KNOW THAT THIS ISN’T ABOUT CREATING IDOLS. IT’S IMPORTANT TO LEARN CHARACTERISTICS OF MANY ROLE MODELS.
FOR SECONDARY AND POST SECONDARY LEARNERS… IT’S IMPORTANT TO REALIZE…

INSPIRATION SPARKS THE FLAME.

REINFORCEMENT FUELS THE FLAME.

CHALLENGE FANS THE FLAME.
The minute that you understand that you can poke life and something will pop out on the other side, that you can change it, you can mold it... that’s maybe the most important thing.

Once you learn that, you’ll never be the same again.

STEVE JOBS
THE HEART OF INNOVATION + CREATIVITY FOR PROFESSIONALS (CONCEPT: DAVID KELLY AT IDEO)

People (desirable)

Business (viable)

Technical (feasible)

Functional Innovation
WHAT DOES PLAY LOOK LIKE IN A SCHOOL?
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[Image of a school interior with play areas]

Image courtesy of: schoolarchitecture.com
WHAT DOES PLAY LOOK LIKE IN A SCHOOL?

Project: DOWA-IBI Group img courtesy of: dowa-ibigroup.com
WHAT DOES PROJECT BASED LEARNING LOOK LIKE IN A SCHOOL?

img.courtesy of: pinterest.com

img.courtesy of: middleschoolteacher.com
WHAT DOES PROJECT BASED LEARNING LOOK LIKE IN A SCHOOL?
WHAT DOES PROJECT BASED LEARNING LOOK LIKE IN A SCHOOL?

![Image courtesy of: texas-ibigroup.com](https://example.com/image.png)
DESIGNING WITH A FIXED MINDSET OR A GROWTH MINDSET

**FIXED MINDSET**

“I’m an architect. I’ve done educational architecture for years. I know what my clients want. I’m going to just stick to that. I know what I’m capable of innovating and what I’m not.”

“I know my district. I can’t let kids have a voice. Let me just make all the decisions and move forward. I know the budget and the community anyways.”

**GROWTH MINDSET**

I’m an architect. I’ve done educational architecture for years. I know what my clients want. But, maybe it’s time I do some digging to figure out how I can better present a new solution that my clients will love.

I know my district. I also know that giving students a voice in their own learning environment produces better outcomes. Maybe I can help the community understand this won’t impact our budget too much, and I can include students in the planning.
WAYS TO BUILD CREATIVE CURIOSITY AMONGST YOUR SELF AND YOUR STAFF

TAKE THE TIME TO PLAY.

Image courtesy of: rackspace.com
WAYS TO BUILD CREATIVE CURIOSITY AMONGST YOUR SELF AND YOUR STAFF

CHALLENGE THE STATUS QUO. ASK MORE QUESTIONS.
WAYS TO BUILD CREATIVE CURiosity AMONGST YOUR SELF AND YOUR STAFF

CREATE A PLUSSING CULTURE.
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